

REMARKS

Applicant submits this Reply to the Office Action mailed June 23, 2008. By this Reply, Applicant request reconsideration of the outstanding claim rejection.

Accordingly, claims 1-12 remain pending in this application.

In the Office Action, claims 1-12 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,199,018 to Quist et al. ("Quist"). Applicant respectfully traverses the rejection for the reasons provided below.

To properly establish an anticipation rejection under 35 U.S.C. § 102, each and every element of each of the rejected claims must be found, either expressly described or under principles of inherency, in the single prior art reference applied. See M.P.E.P. § 2131. Quist cannot anticipate claims 1-12 because Quist does not disclose or even suggest each and every element of the claims. For example, Quist fails to disclose or suggest, among other things, "comparing the data from the at least one test machine to corresponding data of the model development machine; and updating at least one of an estimator and a model of each at least one test machine in response to variations in the compared data," as recited in independent claim 1.

Quist discloses "[a] distributed diagnostic system in which a plurality of local monitoring devices collect local information concerning various machines and process that information, according to redefined diagnostic parameters, for diagnostic purposes." Quist, Abstract. Quist further discloses that "each global neural network running on site processor 14 will have weighting parameters that are initially determined from accelerated testing data but that are refined, over time, in response to actual field collected data." Quist, col. 19, ll. 11-15. The Office Action continues to allege that the

above disclosure of Quist discloses “comparing the data from the at least one test machine to corresponding data of the model development machine,” as recited in claim 1. See Office Action at pages 3-4. Applicant respectfully disagrees.

Quist discloses a process for refining global neural network. For example, Quist adds that “[t]hese globally updated weighting parameters may then be downloaded to the local monitoring devices at various intervals to further enhance the local monitoring devices['] ability to predict the lifetime of the machine to which it is attached.” In other words, Quist *refines* globally updated weighting parameters and downloads the parameters to local monitoring devices. In contrast, independent claim 1 “*compar[es]* the data from the at least one test machine to corresponding data of the model development machine; and updat[es] at least one of an estimator and a model of each at least one test machine *in response to variations in the compared data*” (emphasis added).

Applicant presented the foregoing in a Reply to Office Action filed March 26, 2008. In response, the Office Action states that “[w]ithout variations in the compared data, there is no motivation to refine the weighting parameters.” Office Action at 10. This is not correct. Quist states that “[e]ach such neural network will initially operate according to weighting parameters established from accelerated test data but will also be adapted to receive the field-collected data from the local monitoring devices 12 and use such field collected data to update the weighting parameters.” Quist, col. 19, ll. 3-8. Quist adds that “[f]or example, whenever a machine 11 fails, the collected data corresponding to that machine may be used by such a global neural network as a

known data set for training purposes.” Quist, col. 19, ll. 8-11. In other words, Quist provides an example of refining the neural network without a need for *comparison*.

It appears the Office Action is relying on an inherency argument. However, if relying on inherency, the Examiner must provide extrinsic evidence tending to show inherency. “The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.”

M.P.E.P. § 2112 (IV) (*citing In re Rijckaert*, 9 F.3d 1531, 1534, (Fed. Cir. 1993)). Thus,

[t]o establish inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”

Id. (*citing In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999)). The Examiner has not provided any evidence to prove that refining weighting parameters necessarily requires comparing data from one machine to another. Nor has the Examiner shown that such teaching is necessarily present in Quist. Indeed, as discussed above, such teaching is not present in Quist. Accordingly, Quist fails to disclose each and every feature of independent claim 1. Withdrawal of the Section 102(e) rejection of claim 1 and its dependent claims 2-6 is respectfully requested.

With respect to independent claim 7, similar to the remarks presented above, Quist fails to disclose or even suggest, among other elements, “determining a computed parameter on the test machine; estimating the parameter on the test machine with the delivered neural network; comparing the computed parameter with the estimated parameter; and updating at least one of an estimator and the delivered neural network

model on the test machine in response to variations in the computed parameter and the estimated parameter.”

As noted above, Quist discloses that “[e]ach such neural network will initially operate according to weighting parameters established from accelerated test data but will also be adapted to receive the field-collected data from the local monitoring devices 12 and use such field collected data to update the weighting parameters.” Quist, col. 19, ll. 3-8. That is, Quist describes updating neural networks with data collected from local monitoring devices. In contrast, claim 7 recites “*comparing* the computed parameter with the estimated parameter” (emphasis added). Quist does not disclose or even suggest this feature. Accordingly, Applicant respectfully requests withdrawal of the Section 102(e) rejection of claim 7 and its dependent claims 8 and 9.

Regarding independent claim 10, Quist fails to disclose or even suggest, among other things, “determining a level of variability of the characteristics of each machine as a function of the data; determining a level of variability of the operations of each machine relevant to a respective work site as a function of the data; [and] determining an aging factor of each machine as a function of the data.” The Office Action continues to allege that Quist discloses “determining a level of variability of the characteristics of each machine as a function of the data” at col. 5, lines 27-35 and col. 12, line 61 - col. 13, line 45. Office Action at page 10. Applicant respectfully disagrees.

Quist discloses that “each ‘intelligent’ local monitoring device 12 can learn from its own motor and receive information derived from an analysis of all of the motors that communicate with the personal computer.” Quist, col. 5, ll. 32-35. According to the Office Action, this allegedly shows that “each local monitoring device has information of

its own and of all the other machines.” Office Action at 10-11. The Office Action further alleges that this in combination with Quist’s “normalization routine” anticipates the recited “determining a level of variability of the characteristics of each machine as a function of the data.” Contrary to the Office Action’s assertions, none of these disclosures teaches or even suggests “determining a *level of variability* of the characteristics of each machine as a function of the data” (emphasis added) or “determining a level of variability of the operations of each machine relevant to a respective work site as a function of the data,” as recited in claim 10.

The Office Action further continues to allege that Quist discloses “determining an aging factor of each machine as a function of the data” and cites to col. 16, lines 55-60 and col. 5, lines 27-31. Office Action at page 11. This is not correct. Quist discloses that “[a]nother important operating parameter that may be monitored by the local monitoring device 12 is the total elapsed running time of the electric machine.” In other words, Quist discloses monitoring running time. Quist does not disclose or suggest “determining an aging factor.” Accordingly, Applicant respectfully requests withdrawal of the Section 102(e) rejection of claim 10 and its dependent claims 11 and 12.

Applicant respectfully requests that this Reply under 37 C.F.R. § 1.116 be considered by the Examiner, establishing claims 1-12 are in condition for allowance.

The Office Action contains characterizations of the claims and the related art with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.

In discussing the specification, claims, and drawings in this Reply, it is to be understood that Applicant is in no way intending to limit the scope of the claims to any

exemplary embodiments described in the specification or abstract and/or shown in the drawings. Rather, Applicant is entitled to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation, and applicable case law.

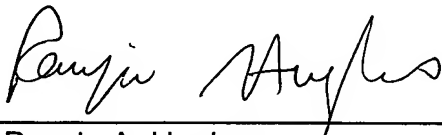
In view of the foregoing remarks, Applicant submits that this claimed invention is not anticipated by or rendered obvious over the prior art references cited against this application. Applicant therefore requests the Examiner's reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this Amendment and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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Dated: October 7, 2008

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